WHAT IS CLAIMED IS:

1. A film winding method comprising steps of:

winding continuous polymer film into a form of a film roll; and

during said winding, preventing looseness of outer turns of said film roll by pressing a rotatable lay-on roll against a peripheral surface of said film roll;

wherein said lay-on roll includes a surface material, formed in a cylindrical shape, and including rubber which has volume resistivity of 10^2-10^{12} Ωcm, and hardness of 30-70.

2. A film winding method as defined in claim 1, wherein said lay-on roll further includes a roll body about which said surface material is disposed in a cylindrical form.

3. A film winding method as defined in claim 2, wherein said roll body is formed from metal.

4. A film winding method as defined in claim 1, wherein said surface material has said volume resistivity of 10^4-10^8 Ωcm.

5. A film winding method as defined in claim 4, wherein said surface material has said hardness of 30-60.

6. A film winding method as defined in claim 1, wherein said surface material has high resistance to ozone.

7. A film winding method as defined in claim 1, wherein a winding speed of said polymer film is 30 meters per minute or more.

8. A film winding method as defined in claim 1, wherein said polymer film has a thickness of 125 microns or less.

9. A film winding method as defined in claim 8, wherein said polymer film has said thickness of 85 microns or less.

10. A film winding method as defined in claim 1, wherein a pressing force of said lay-on roll to said film roll is 10-100 N.

11. A film winding method as defined in claim 10, wherein said pressing force is 20-80 N.

12. A film winding method as defined in claim 11, wherein said pressing force is decreased in a range from 60 N down to 30 N according to an increase in a radius of said film roll.

13. A film winding method as defined in claim 1, wherein said polymer film is cellulose acylate or polyester.

14. A film winding method as defined in claim 1, wherein said surface material further includes carbon.

15. A film winding method as defined in claim 1, wherein said polymer film has a width of 600-3,500 mm.

16. A film winding method as defined in claim 1, wherein a length of winding of said polymer film into said film roll is 500-10,000 meters.

17. A lay-on roll for a film winding apparatus for winding continuous polymer film into a form of a film roll, said lay-on roll being pressed against said film roll while said polymer film is wound by said film winding apparatus, for preventing looseness of outer turns of said film roll, said lay-on roll comprising:

a rotatable roll body; and

a surface material, disposed about said roll body, and including rubber which has volume resistivity of 10^2-10^{12} Ωcm, and hardness of 30-70.

18. A lay-on roll as defined in claim 17, wherein said surface material has high resistance to ozone.

19. A lay-on roll as defined in claim 17, wherein a pressing force of being pressed to said film roll is 10-100 N.

20. A lay-on roll as defined in claim 17, wherein said polymer film is cellulose acylate or polyester.

21. A film winding apparatus comprising:

a spindle for winding continuous polymer film into a form of a film roll thereabout; and

a lay-on roll, pressed against a peripheral surface of said film roll while said polymer film is wound about said spindle, for preventing looseness of outer turns of said film roll;

said lay-on roll including:

a rotatable roll body; and

a surface material, disposed about said roll body, and including rubber which has volume resistivity of 10^2-10^{12} Ωcm, and hardness of 30-70.